Chart 12304 NM 26/04

DELAWARE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2004

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BRANDYWINE RANGE	38.5	A41.7	42.1	40.9	6-03	1000	10.94	40
MIAH MAULL RANGE	40.5	40.7	41.2	40.0	8-03	1000	7.02	40
CROSS LEDGE RANGE	41.0	41.4	41.5	40.3	8-03	1000	3.39	40
LISTON RANGE (BELOW SHIP JOHN LIGHT)	42.3	41.4	41.5	40.3	8-03	1000	5.57	40
LISTON RANGE (ABOVE SHIP JOHN LIGHT)	41.4	40.6	40.6	41.8	7-03	1000-800	12.42	40

A. 40 FT OBSTRUCTION LOCATED IN 39°04'29.76"N, 75°10'49.48"W.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12347 NM 26/04

HUDSON RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB 1999 AND SURVEYS TO JAN 2004

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
KINGSTON POINT REACH	32.0	32.0	27.3	7-02; 8-03	400	2.2	32
BARRYTOWN REACH	32.0	32.0	31.7	7-02; 8-03	400	0.9	32
TIVOLI REACH	30.1	32.0	32.0	7-02; 9-03	400	0.4	32
MALDEN ON HUDSON REACH	32.7	31.5	31.1	12-03	400	0.5	32
NORTH GERMANTOWN REACH	30.1	30.4	28.5	9-02; 9-03	400	2.0	32
NORTH GERMANTOWN REACH TO HUDSON CITY LIGHT	31.6	31.4	29.1	9-02;11-03	400	6.4	32
HUDSON CITY LIGHT TO HUDSON RIVER LIGHT "140"	26.7	31.4	29.3	9-02; 7-03	400	2.1	32
HUDSON RIVER LIGHT "140" TO FOURMILE POINT (CHART 12348)	28.4	29.6	31.1	9-02; 1-04	400	1.5	32

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12348 NM 26/04

HUDSON RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB 1998 AND SURVEYS TO JAN 2004

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
HUDSON RIVER LIGHT "140" (CHART 12347) TO FOURMILE POINT	28.4	29.6	31.1	9-02; 1-04	400	1.5	32
FOURMILE POINT TO 730 YARDS NORTH OF MILL CREEK LIGHT "MC"	29.0	29.9	27.4	9-02; 7-03	400	7.0	32
ANCHORAGE AT STUYVESANT	31.2	31.5	29.3	11-01	400	0.4	32
730 YARDS NORTH OF MILL CREEK LIGHT "MC" TO ALBANY TURNING BASIN	22.4	31.0	26.1	1,8,9 - 02; 1-04	400-500	12.1	32
TURNING BASIN AT ALBANY	34.0	32.8	25.3	12-03	600	0.3	32
TURNING BASIN AT ALBANY TO DUNN MEMORIAL BRIDGE	15.6	15.0	13.8	10-02; 7-03	300-400	0.9	27-32
(AT LOWEST LOW WATER) DUNN MEMORIAL BRIDGE TO PATROON ISLAND BRIDGE	9.2	14.0	13.8	11-01; 7-03	616-400	1.7	14
PATROON ISLAND BRIDGE TO NORTH END OF ADAMS ISLAND	10.2	13.4	4.5	9-02; 7-03	400-200	5.3	14
THENCE TO TROY LOCK	7.0	13.6	10.9	7-02; 7-03	600-45	0.3	14
CHANNEL EAST OF ADAMS ISLAND	13.8	14.0	8.9	7-02; 7-03	145	0.4	14

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18502 NM 26/04

GRAYS HARBOR

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB 2004 AND SURVEYS TO JUN 2003

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BAR CHANNEL	46.7	46.4	45.0	5-03	1000	4.6	46
ENTRANCE CHANNEL	35.0	34.5	37.2	5,6-03	900-600	1.8	42
PT CHEHALIS REACH	35.0	35.4	34.1	6-03	600	1.2	40
SOUTH REACH	34.3	37.0	36.1	3, 5, 6-03	600-350	4.1	36
CROSSOVER CHANNEL	29.0	33.5	32.6	6-03	350-450	2.5	36
NORTH CHANNEL	37.1	37.5	34.0	6-03	450-350	2.4	36
HOQUIAM REACH	37.5	36.8	33.9	1,6-03	350	1.9	36
COW POINT REACH	35.4	35.7	33.7	12-02; 1-03; 2-03	350-900	1.8	36
ABERDEEN REACH	27.8	29.8	29.0	10-01; 2-02; 2-03	550-200	2.6	30
TURNING BASIN	32.5	32.4	24.5	1-02	200-550	.3	30
THENCE TO COSMOPOLIS	26.5	26.9	27.7	1-02; 2-03	200	.8	30

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18524 (Left Panel) NM 26/04

COLUMBIA RIVER CHANNEL DEPTHS
GULL ISLAND TURN AND CHANNEL TO SAINT HELENS TURN

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF APRIL 30, 2004

	CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
GULL I TURN AND CHANNEL	46	46	41	37	4-04	600	2.2	40
STELLA RANGE	36	39	40	39	4-04	600	2.8	40
FISHER I CHANNEL	36	39	40	40	4-04	600	0.9	40
WALKER I CHANNEL	38	42	39	38	4-04	600	1.5	40
BARLOW PT. CHANNEL	43	45	39	39	4-04	600	1.3	40
SLAUGHTERS CHANNEL	38	41	39	36	4-04	600	2.3	40
SLAUGHTERS TURN AND CHANNEL OPPOSITE THE TURNING BASIN	39	39	41	39	4-04	600	1.7	40
COTTONWOOD ISLAND LOWER RANGE	30	39	40	38	4-04	600	1.7	40
COTTONWOOD ISLAND TURN	43	42	39	39	4-04	600	2.7	40
COTTONWOOD ISLAND UPPER RANGE	42	42	41	42	4-04	600	1.6	40
KALAMA LOWER RANGE	43	41	40	36	4-04	600	1.8	40
KALAMA UPPER RANGE	39	43	42	39	4-04	600	2.2	40
BYBEE LEDGE CHANNEL	40	41	42	41	4-04	600	2.1	40
MARTIN ISLAND CHANNEL	41	41	40	38	4-04	600	2.1	40
MARTIN ISLAND RANGE	40	41	41	42	4-04	600	1.4	40
COLUMBIA CITY CHANNEL	39	41	39	40	4-04	600	1.2	40
ST. HELENS RANGE	39	40	41	37	4-04	600	2.0	40
ST. HELENS TURN	43	43	41	38	4-04	600	1.7	40

* CONTROLLING DEPTHS ROUNDED TO NEAREST FOOT

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18588 NM 26/04

COQUILLE RIVER CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 2002 AND SURVEYS TO JULY 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
A ENTRANCE CHANNEL	14	15	14	7-03	200	0.33	13.0
ENTRANCE CHANNEL TO PORT DOCK (43°07'15.9"N, 124°24'50.5"W)	14	12	8	7-03	200	0.63	13.0
THENCE TO END OF PROJECT	12	13	14	5-03	150	0.38	13.0

A. THE ENTRANCE CHANNEL IS SUBJECT TO FREQUENT CHANGES AND THE DEEPEST WATER IS NOT ALWAYS ON THE RANGE.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION